

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.03.2023

Version number 3

Revision: 21.03.2023

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

. 1.1 Product identifier

. Trade name: Liquid

. Article number: 16100000

. 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

. Application of the substance / the mixture Mixing liquid for expansion control for phosphate-bonded investments

. 1.3 Details of the supplier of the safety data sheet

. Manufacturer/Supplier:

Klasse 4 Dental GmbH

Bismarckstr. 21

D-86159 Augsburg

Phone +49 821-608914-0 Fax +49 821-608914-10

. Information: product information: +49 821-608914-0

. 1.4 Emergency telephone number:

Tel.: +49 821-608914-0, Monday to Thursday 8.00 am to 4.30 pm MEZ, Friday 8.00 am to 3.00 pm MEZ
in German and English language Please also contact the national emergency numbers

SECTION 2: Hazards identification

. 2.1 Classification of the substance or mixture

. Classification according to Regulation (EC) No 1272/2008

The product is not to be classified according to the GB CLP regulation.

. 2.2 Label elements

. Labelling according to Regulation (EC) No 1272/2008 Void

. Hazard pictograms Void

. Signal word Void

. Hazard statements Void

. Information pertaining to particular dangers for man and environment

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

. Description: Blend of silica gel, amorphous, in water

. Dangerous components: Void

. Additional information No further relevant information available.

SECTION 4: First aid measures

. 4.1 Description of first aid measures

. General information No special measures required.

. After inhalation : Supply fresh air; consult doctor in case of symptoms.

. After skin contact : Wash with water and soap.

. After eye contact : Rinse opened eye for 15 minutes under running water. If symptoms persist, consult doctor.

. After swallowing :

Rinse out mouth and then drink plenty of water (approx. 500 ml). In case of persistent symptoms consult doctor.

. 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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- . **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- . **5.1 Extinguishing media**
Suitable extinguishing agents
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water jet. Fight larger fires with foam.
- . **5.2 Special hazards arising from the substance or mixture** none
- . **5.3 Advice for firefighters**
- . **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- . **6.2 Environmental precautions:**
Do not allow concentrated solutions to enter drainage system, surface or ground water.
- . **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- . **6.4 Reference to other sections** No dangerous materials are released.

SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling**
No special precautions necessary if used correctly. Keep containers tightly sealed.
- . **Information about protection against explosions and fires:** No special measures required.
- . **7.2 Conditions for safe storage, including any incompatibilities**
- . **Storage**
- . **Requirements to be met by storerooms and containers:** No special requirements.
- . **Information about storage in one common storage facility:** Not required.
- . **Further information about storage conditions:** Protect from frost.
Store in cool, dry conditions in well sealed containers.
- . **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- . **8.1 Control parameters**
- . **Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- . **Additional information:** The lists that were valid during compilation were used as a basis.
- . **8.2 Exposure controls**
- . **Personal protective equipment**
- . **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- . **Breathing equipment:** Not required.
- . **Protection of hands:** Protective gloves:
In case of spray contact at least protection index 2 recommended, according to more than 30 min. penetration time (EN

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374).

Layer thickness of gloves at least: 0.4 mm

In case of prolonged and intensive contact protection index 6 recommended, according to more than 480 min. penetration time (EN 374).

Layer thickness of gloves at least: 0.7 mm

- . **Material of gloves** Butyl rubber, BR
Fluorocarbon rubber (Viton) Nitrile rubber, NBR
Natural rubber, NR Chloroprene rubber, CR Neoprene gloves

. **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- . **Not suitable are gloves made of the following materials:** Leather gloves

. **Eye protection:** Safety glasses (DIN 58211, EN 166)

. **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

. **9.1 Information on basic physical and chemical properties**

. **General Information**

. **Appearance:**

- | | |
|-----------------------------|----------------|
| . Form: | Fluid |
| . Colour: | White |
| . Smell: | Odourless |
| . Odour threshold: | not applicable |
| . pH-value at 20 °C: | 9.5 (100 %) |

. **Change in condition**

- | | |
|---|-------------------------------|
| . Melting point/freezing point: | Not determined not determined |
| . Initial boiling point and boiling range: | 100 °C |

. **Flash point:** Not applicable

. **Inflammability (solid, gaseous)** not applicable

. **Ignition temperature:** not applicable

. **Decomposition temperature:** not determined

. **Explosive properties:** Product is not explosive.

. **Critical values for explosion:**

. **Lower:** not applicable

. **Dust explosion class:**

. **Oxidising properties** none

. **Steam pressure:** Not determined. not determined

. **Density at 20 °C** 1.22 g/cm³

. **Evaporation rate** not determined

. **Solubility in / Miscibility with**

. **Water:** Fully miscible

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- . **Partition coefficient: n-octanol/water:** not determined
- . **Viscosity:**
 - dynamic at 20 °C: 20 mPas
 - kinematic: Not determined.
- . **Solvent content:**
 - Water: 70.0 %
- . **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- . **10.1 Reactivity** No hazardous reactions when stored and handled according to instructions.
- . **10.2 Chemical stability**
- . **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- . **10.3 Possibility of hazardous reactions** No dangerous reactions known
- . **10.4 Conditions to avoid** No further relevant information available.
- . **10.5 Incompatible materials:** No further relevant information available.
- . **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- . **11.1 Information on toxicological effects**
 - . **Acute toxicity** Based on available data, the classification criteria are not met.
 - . **LD/LC50 values that are relevant for classification:**
-
- 7631-86-9 silicon dioxide, chemically prepared**
- Oral LD50 >10,000 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
- | Components | Type | Value | Species |
|------------|------------|--------------|---------------|
| Product | LD50: oral | > 2000 mg/kg | rat (analogy) |
- . **Primary irritant effect:**
 - . **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
 - . **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
 - . **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
 - . **Additional toxicological information:**
 - . **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** No further relevant information available.
 - . **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - . **Carcinogenicity** Based on available data, the classification criteria are not met.
 - . **Reproductive toxicity** Based on available data, the classification criteria are not met.
 - . **STOT-single exposure** Based on available data, the classification criteria are not met.
 - . **STOT-repeated exposure** Based on available data, the classification criteria are not met.
 - . **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- . **12.1 Toxicity**
 - . **Aquatic toxicity:**
-
- 7631-86-9 silicon dioxide, chemically prepared**
- LC50 (96 h) >5,000 mg/L (Brachydanio rerio)
EC50 >10,000 mg/L (bacteria)
- . **12.2 Persistence and degradability** Inorganic salts are basically not biodegradable.

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- . **Other information:** Easy elimination possible by flocculation or adsorption by sludge.
- . **12.3 Bioaccumulative potential** No further relevant information available.
- . **12.4 Mobility in soil** No further relevant information available.
- . **Ecotoxicological effects:**
- . **Other information:**
No COD, no BOD, no AOX
No VOC (0%) according to EC-directive 1999/13/EC
- . **Additional ecological information:**
- . **According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC:**
None
- . **General notes:** Generally not hazardous for water.
- . **12.5 Results of PBT and vPvB assessment**
- . **PBT:** Not applicable.
- . **vPvB:** Not applicable.
- . **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- . **13.1 Waste treatment methods**
- . **Recommendation**
Smaller quantities can be disposed with household garbage.
Can be deposited with household garbage after consulting with the operator of the waste disposal facility and the pertinent authorities and under adherence to the necessary technical regulations.
- . **Uncleaned packaging:**
- . **Recommendation:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
Dispose of packaging according to regulations on the disposal of packagings.
- . **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

- | | |
|--|--|
| . 14.1 UN-Number | |
| . ADR/RID/ADN, IMDG, IATA | Void |
| . 14.2 UN proper shipping name | |
| . ADR/RID/ADN, IMDG, IATA | Void |
| . 14.3 Transport hazard class(es) | |
| . ADR/RID/ADN, IMDG, IATA | |
| . Class | Void |
| . 14.4 Packing group | |
| . ADR/RID/ADN, IMDG, IATA | Void |
| . 14.5 Environmental hazards: | Not applicable. |
| . 14.6 Special precautions for user | Not applicable. |
| . 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| . Transport/Additional information: | Not dangerous according to the above regulations.
Frost protected transport has to be guaranteed. |
| . UN "Model Regulation": | Void |

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SECTION 15: Regulatory information

- . **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **Directive 2012/18/EU**
- . **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- . **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- . **Department issuing data specification sheet:** Klasse 4 Dental GmbH
- . **Contact:**
sales manager, info@klasse4.de
- . **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
- . **Sources:** source ECHA: European Chemicals Agency, <http://echa.europa.eu/>
- . *** Data compared to the previous version altered.**